

# Gerald A Urban

## List of Publications by Year in descending order

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Version: 2024-02-01

65  
papers

1,708  
citations

430874

18  
h-index

289244

40  
g-index

69  
all docs

69  
docs citations

69  
times ranked

2557  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biosensor-Enabled Multiplexed On-Site Therapeutic Drug Monitoring of Antibiotics. <i>Advanced Materials</i> , 2022, 34, e2104555.	21.0	29
2	Microfluidic organ-on-chip system for multi-analyte monitoring of metabolites in 3D cell cultures. <i>Lab on A Chip</i> , 2022, 22, 225-239.	6.0	66
3	Electrochemical microelectrode degradation monitoring: in situ investigation of platinum corrosion at neutral pH. <i>Journal of Neural Engineering</i> , 2022, 19, 016005.	3.5	8
4	Standard cochlear implants as electrochemical sensors: Intracochlear oxygen measurements in vivo. <i>Biosensors and Bioelectronics</i> , 2022, 199, 113859.	10.1	10
5	Biosensor-Enabled Multiplexed On-Site Therapeutic Drug Monitoring of Antibiotics ( <i>Adv. Mater.</i> ) Tj ETQq1 1 0.784314 rgBT /Overlo	21.0	1
6	Mechanical ventilation restores blood gas homeostasis and diaphragm muscle strength in ketamine/medetomidine-anaesthetized rats. <i>Experimental Physiology</i> , 2021, 106, 396-400.	2.0	0
7	Long-term in vivo monitoring of gliotic sheathing of ultrathin entropic coated brain microprobes with fiber-based optical coherence tomography. <i>Journal of Neural Engineering</i> , 2021, 18, 045002.	3.5	0
8	Non-Invasive Diagnostics: Integrated Devices for Non-Invasive Diagnostics ( <i>Adv. Funct. Mater.</i> 15/2021). <i>Advanced Functional Materials</i> , 2021, 31, 2170105.	14.9	2
9	CRISPR-powered electrochemical microfluidic multiplexed biosensor for target amplification-free miRNA diagnostics. <i>Biosensors and Bioelectronics</i> , 2021, 177, 112887.	10.1	117
10	A Real-Time Thermal Sensor System for Quantifying the Inhibitory Effect of Antimicrobial Peptides on Bacterial Adhesion and Biofilm Formation. <i>Sensors</i> , 2021, 21, 2771.	3.8	9
11	Electrochemical Microsensor for Microfluidic Glyphosate Monitoring in Water Using MIP-Based Concentrators. <i>ACS Sensors</i> , 2021, 6, 2738-2746.	7.8	24
12	In Situ Mapping of H <sub>2</sub> , O <sub>2</sub> , and H <sub>2</sub> O <sub>2</sub> in Microreactors: A Parallel, Selective Multianalyte Detection Method. <i>ACS Sensors</i> , 2021, 6, 1583-1594.	7.8	10
13	Integrated Devices for Non-Invasive Diagnostics. <i>Advanced Functional Materials</i> , 2021, 31, 2010388.	14.9	51
14	Impact of assay format on miRNA sensing: Electrochemical microfluidic biosensor for miRNA-197 detection. <i>Biosensors and Bioelectronics</i> , 2020, 148, 111824.	10.1	47
15	A lab-on-a-chip for free-flow electrophoretic preconcentration of viruses and gel electrophoretic DNA extraction. <i>Analyst, The</i> , 2020, 145, 2554-2561.	3.5	13
16	Enhanced Protein Immobilization on Polymers—A Plasma Surface Activation Study. <i>Polymers</i> , 2020, 12, 104.	4.5	33
17	Digital DNA microarray generation on glass substrates. <i>Scientific Reports</i> , 2020, 10, 5770.	3.3	20
18	Deposition of Copper Nanofilms by Surface-Limited Redox Replacement of Underpotentially Deposited Lead on Polycrystalline Gold. <i>Journal of the Electrochemical Society</i> , 2019, 166, D3001-D3005.	2.9	2

#	ARTICLE	IF	CITATIONS
19	Wafer Level Approach for the Investigation of the Long-Term Stability of Resistive Platinum Devices at Elevated Temperatures. , 2019, , .		1
20	How to copy and paste DNA microarrays. Scientific Reports, 2019, 9, 13940.	3.3	3
21	Unamplified gene sensing via Cas9 on graphene. Nature Biomedical Engineering, 2019, 3, 419-420.	22.5	25
22	CRISPR/Cas Powered Multiplexed Biosensing. Trends in Biotechnology, 2019, 37, 791-792.	9.3	68
23	Direct antimicrobial susceptibility testing of bloodstream infection on SlipChip. Biosensors and Bioelectronics, 2019, 135, 200-207.	10.1	29
24	Gold Nanogap Interdigitated Arrays for Redox Cycling Amplified Dopamine Detection. , 2019, , .		1
25	A lab-on-a-chip for rapid miRNA extraction. PLoS ONE, 2019, 14, e0226571.	2.5	11
26	Direct DNA and RNA detection from large volumes of whole human blood. Scientific Reports, 2018, 8, 3410.	3.3	27
27	Electrochemical Characterization of Nanogap Interdigitated Electrode Arrays for Lab-on-a-Chip Applications. Journal of the Electrochemical Society, 2018, 165, B127-B134.	2.9	17
28	Direct enrichment of pathogens from physiological samples of high conductivity and viscosity using H-filter and positive dielectrophoresis. Biomicrofluidics, 2018, 12, 014109.	2.4	12
29	Multimodal Chemosensor-Based, Real-Time Biomaterial/Cell Interface Monitoring. Advanced Biology, 2018, 2, 1700236.	3.0	4
30	Interstitial Glucose and Lactate Levels Are Inversely Correlated With the Body Mass Index: Need for In Vivo Calibration of Glucose Sensor Results With Blood Values in Obese Patients. Journal of Diabetes Science and Technology, 2018, 12, 341-348.	2.2	7
31	In-vivo monitoring of infection via implantable microsensors: a pilot study. Biomedizinische Technik, 2018, 63, 421-426.	0.8	6
32	Capacity of rTth polymerase to detect RNA in the presence of various inhibitors. PLoS ONE, 2018, 13, e0190041.	2.5	8
33	Multiplexed Point-of-Care Testing "xPOCT. Trends in Biotechnology, 2017, 35, 728-742.	9.3	386
34	Dry Film Photoresist-based Electrochemical Microfluidic Biosensor Platform: Device Fabrication, On-chip Assay Preparation, and System Operation. Journal of Visualized Experiments, 2017, , .	0.3	4
35	Biosensors and personalized drug therapy: what does the future hold?. Expert Review of Precision Medicine and Drug Development, 2017, 2, 303-305.	0.7	9
36	Accessing 3D microtissue metabolism: Lactate and oxygen monitoring in hepatocyte spheroids. Biosensors and Bioelectronics, 2017, 87, 941-948.	10.1	83

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37	Low-Volume Label-Free Detection of Molecule-Protein Interactions on Microarrays by Imaging Reflectometric Interferometry. <i>SLAS Technology</i> , 2017, 22, 437-446.	1.9	16
38	A dished diaphragm for the miniature encapsulation of a pressure sensor for in-vivo applications. , 2017, , .		0
39	Highly Sensitive Electrochemical Glutamate Microsensors for Food Analysis. <i>Proceedings (mdpi)</i> , 2017, 1, .	0.2	5
40	In-Situ Electrophoretic Mobility Determination by Particle Image Velocimetry for Efficient Microfluidic Enrichment of Bacteria. <i>Proceedings (mdpi)</i> , 2017, 1, .	0.2	0
41	Electrochemical Multisensor System for Monitoring the Hydrogen Peroxide Direct Synthesis in Microreactors. <i>Proceedings (mdpi)</i> , 2017, 1, 630.	0.2	1
42	Modular development of an inline monitoring system for waterborne pathogens in raw and drinking water. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	2.7	7
43	Microfabricated, amperometric, enzyme-based biosensors for in vivo applications. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 4503-4521.	3.7	79
44	Multianalyte Antibiotic Detection on an Electrochemical Microfluidic Platform. <i>Analytical Chemistry</i> , 2016, 88, 10036-10043.	6.5	79
45	The Effect of Low Pressure Plasma Polymerization Modes on the Properties of the Deposited Plasma Polymers. <i>Plasma Processes and Polymers</i> , 2016, 13, 744-751.	3.0	2
46	Lift-Off Free Fabrication Approach for Periodic Structures with Tunable Nano Gaps for Interdigitated Electrode Arrays. <i>ACS Nano</i> , 2016, 10, 1086-1092.	14.6	24
47	Determination of thermal properties of gases under flow conditions. , 2014, , .		1
48	Polymer-based, flexible glutamate and lactate microsensors for in vivo applications. <i>Biosensors and Bioelectronics</i> , 2014, 61, 192-199.	10.1	91
49	Sensitive, rapid and quantitative detection of substance P in serum samples using an integrated microfluidic immunochip. <i>Biosensors and Bioelectronics</i> , 2014, 58, 186-192.	10.1	19
50	Swelling and Water Uptake Behavior of Nanofilms Obtained by a Magnetron Enhanced Plasma-Polymerization Process. <i>Plasma Processes and Polymers</i> , 2013, 10, 904-911.	3.0	2
51	Nanofilms Produced by Magnetron Enhanced Plasma Polymerization from Methane and Oxygen for Coating of Rigid Contact Lenses. <i>Plasma Processes and Polymers</i> , 2013, 10, 970-977.	3.0	11
52	A novel, multiparametric, flexible microsensor for metabolic monitoring in vivo. , 2013, , .		2
53	Effect of Plasma Treatments and Plasma-polymerized Films on the Adhesion of Parylene-C to Substrates. <i>Plasma Processes and Polymers</i> , 2013, 10, 1081-1089.	3.0	16
54	Phaseguides: a paradigm shift in microfluidic priming and emptying. <i>Lab on A Chip</i> , 2011, 11, 1596.	6.0	171

#	ARTICLE	IF	CITATIONS
55	A novel multiparametric microphysiometry system for dynamic cell culture monitoring. , 2010, , .		2
56	A thermal flow sensor with liquid characterization feature. , 2010, , .		1
57	Monitoring of peri-cellular oxygen levels in tumor cell cultures by amperometric oxygen sensor array. , 2010, , .		1
58	Amperometric micro-immunosensor for rapid Substance-P quantification in biological fluids. , 2009, , .		0
59	Simulation and design of a nitric oxide sensor array for cell cultures. , 2009, , .		0
60	Frequency response of a 2D flow and thermal property sensor. , 2009, , .		3
61	Sensitivity-maximizing and error-reducing design of a flow and thermal property sensor. , 2008, , .		4
62	Ultraviolet light in glow discharges. Journal of Applied Physics, 2008, 104, 103303.	2.5	7
63	Electron dynamics of low-pressure deposition plasma. Pure and Applied Chemistry, 2008, 80, 1883-1892.	1.9	8
64	Pressure Dependence of Plasma Polymerization of Methane at ConstantW/FM. Plasma Processes and Polymers, 2007, 4, S794-S796.	3.0	4
65	BioMEMS for the electrochemical detection of troponin I. , 2006, , .		0